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# APPEARANCE OF THE FRONTIER IN AMERICA

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BY

FREDERIC L. PAXSON

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## THE PACIFIC RAILROADS AND THE DIS-APPEARANCE OF THE FRONTIER IN AMERICA

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## THE PACIFIC RAILROADS AND THE DISAPPEARANCE OF THE FRONTIER IN AMERICA.

#### By FREDERIC L. PAXSON.

Within recent years it has become a commonplace in American history that the influence of the frontier is the one constant to be reckoned with in accounting for the development of American life during its first century of independent existence. The frontier has been defined so as to describe the line dividing a western area, chiefly unoccupied by whites, and an eastern region given over to an increasing agriculture. In the face of an advancing population it has retreated rapidly from the fall line to the semiarid plains, where it finally disappeared in the decade of the eighties. Its influence did much in directing American life during its period, and since its passing new national problems and ideals have marked a change in both people and government of the United States.

The passing of the frontier is the phenomenon of the eighties, now generally accepted, yet like most matters of recent history not really demonstrated. Its best historian remarked, in 1893, that "now, four centuries after the discovery of America, at the end of a hundred years of life under the Constitution, the frontier has gone, and with its going has closed the first period of American history." <sup>a</sup> Its passing is not, however, undemonstrated because of its difficulty, since the facts of the years from 1880 to 1885 throw themselves naturally into groupings whose logical key is this idea of the completion of the first period of national growth.

There have been two frontiers in the United States that have controlled periods of national thought by their duration. In the forties and early fifties a broad, sparsely settled frontier lay between the old East and the Missouri and Mississippi settlements. Wagon roads and canals connected the distant borders, but the resulting unity was so slight that the completion of the trunk-line railroads in the fifties worked a revolution in economic and intellectual conditions. Just how far the northern spirit that maintained the Union is the result of these developments in transportation no one has measured.

<sup>&</sup>lt;sup>a</sup>F. J. Turner, The Significance of the Frontier in American History, in Annual Report of the American Historical Association, 1893, 227.

The crossing of this old eastern frontier left but one difficult area in the United States. From the western boundary of Missouri, Arkansas, and Iowa to the Pacific States stretched the great American desert with its deficiencies in rainfall and its scanty native population.<sup>a</sup> So long as this area remained intact the frontier continued to exert its dominant influence, but when it succumbed to the pressure of economic advance the frontier was gone forever. The years from 1869 to 1884 cover the final period in the life of the last frontier. The beginning of the end comes with the completion of the Union and Central Pacific railways in 1869; the period closes with the opening of the other Pacific railways in 1882–1884.

The great American desert became a reality in frontier life as early as 1819. Until this time the edge of the frontier had been east of the Mississippi River, and its people had depended on the East. But the settlement of Missouri brought population to the bend of the Missouri River by 1819, and within the influence of an overland trade that beckoned from the Spanish towns at Santa Fe. This Santa Fe trade was an important element in frontier prosperity from the erection of Fort Leavenworth in 1827 until the Mexican war.b In these years the route across the plains and along the Arkansas and Purgatory rivers was worn deeper and deeper. In the middle of the forties the call of the Northwest drew another trail from Fort Leavenworth along the Platte, by South Pass, and down the Snake River into Oregon, while the diggings on the Sacramento tempted the Forty-niners across the Nevada desert and along the Humboldt into California. When the Mexican war was over Congress was facing a territorial problem on the Pacific coast that was made more difficult by the existence of the great frontier which divided the centers of American life. Yet already the overland trails, inadequate as they were, had revealed the possibility and early necessity of railroad routes extending from ocean to ocean.

When the agitation for a Pacific Railway commenced there were these two beaten tracks connecting the Missouri River and the Pacific. Trappers and explorers had pointed out the possibility of other routes,

<sup>&</sup>lt;sup>a</sup> Popular Imagination exaggerated the degree of aridity which prevailed in the desert, Maj. Stephen II. Long, who visited the Rocky Mountains in 1820, stated that the area was "almost wholly unfit for cultivation, and of course unluhabilitable by a people depending upon agriculture for their subsistence." (R. G. Thwaites, Enrly Western Travels, XIV, 20.) The accounts of the Long expedition occupy four volumes in Thwaites. Their inflavorable estimate helped to shape the popular Imagination.

<sup>6</sup> Occasional trips to Santa Fe gave way about 1825 to fairly regular traffic. Congress in 1825 authorized the construction of a wagon road for its use. (H. II. Bancroft, Works, XVII, 333; J. W. Million, State Aid to Railways in Missouri, 1, 2.) A millitary post was established in 1827 at Cantonment Leavenworth, from which point the Sixth Infantry operated as escort to the curavans. (Report of the Quartermaster-General to the Secretary of War, 1827, 20th Cong., 1st sess., S. Doc. 1, p. 79, and p. 48, insert "d." See also Secretary Eaton's Report, 1829, 21st Cong., 1st sess., S. Doc. 1, p. 30.) c Josiah Gregg, Commerce of the Prairies, or the Journal of a Santa Fe Trader, 2 vols.,

c Josiah Gregg, Commerce of the Prairies, or the Journal of a Santa Fe Trader, 2 vols., New York, 1845, is the classic account of the Santa Fe traffic. The book, often reprinted, is in Thusites. Early Western Travels, XIX, XX.

but the pressure of population along the easiest channels of communication had developed the prominence of the Missouri bend, between Independence and Council Bluffs, as the chief eastern point of departure. Hence the two trails from Fort Leavenworth by the Platte and Arkansas carried most of the Pacific traffic that journeyed overland. By 1850 the systematic lobbying of Asa Whitney and his allies had educated the public to an acceptance of the railway idea, but the emergence of slavery sectionalism had made a choice among particular routes impossible.<sup>b</sup> Until after 1853 the only progress made was the survey of five available routes ordered by the army appropriation bill of that year, and until after the elimination of southern influence, in 1861, no further step was taken. In all these years, while the old eastern transportation frontier was in process of demolition. the rivalry of New Orleans, Vicksburg, Memphis, Cairo, St. Louis, and Chicago, and their hinterlands kept the western frontier unbroken.

In the history of the frontier the Union Pacific Railway marks the beginning of the end. Chartered in 1862, reendowed in 1864, started on its race for lands and subsidies in 1866, it finally completed a through track across the continent in 1869. The celebration of completion at Promontory Point on May 10, 1869, was not unnoticed even ' in its own day as a national act. The public was generally conscious that a great event had taken place; cities devoted themselves to open. demonstration; Bret Harte broke into song under its influence.h But in reality the frontier was not destroyed. From a narrow strip across the plains Indians had been pushed to one side and another and a single track had crossed the mountains, but north and south great areas remained untouched, for the demolition of the frontier had only just begun.

a For several years Fort Atkinson, at Council Bluffs, was the chief military post on the far western frontier. The erection of Fort Leavenworth, which was more conveniently situated for policing the trails, lessened its importance. In 1825 there were stationed at Fort Atkinson four companies of the First Infantry and ten of the Sixth. (Report of General Brown to the Secretary of War, 1825, 19th Cong., 1st sess., S. Doc. 1, p. 10, insert "d.")

b The genesis of the Pacific railway idea is traced in J. P. Davis, The Union Pacific Rallway, 1-110, and in E. V. Smalley, History of the Northern Pacific Railroad, 1-112.

The reports on these surveys fill eleven large volumes. They were published as 33d Cong., 2d sess., S. Ex. Doc. 78. Cf. Tables of and Annotated Index to the Congressional Series of United States Public Documents, Washington, 1902, 551, note.

d 12 United States Statutes at Large, 489.

<sup>\*13</sup> United States Statutes at Large, 455.

\*14 United States Statutes at Large, 75.

\*Davis, Union Pacific Railway, 152; J. H. Beadle, The Undeveloped West; or, Five Years in the Territories, Philadelphia, 1873, 126; Sidney Dillon, The Last Spike, in Scribner's Magazine, XII, 253-259; Samuel Rowles, The Pacific Railroad Open, in Atlantic Monthly, XXIII, 493-502, 617-625, 753-762; H. H. Bancroft, History of California, VII, 570; Rocky Mountain Directory and Colorado Gazetteer for 1871, 117.

Bret Harte, What the Engines Said, in Poetical Works, 1882, 283.

<sup>4</sup> F. A. Walker, in North American Review, CXVI, 367.

The effort that finally destroyed the continental frontier differed from all earlier movements in the same direction in that it was selfconscious, deliberate, and national. "The frontier reached by the Pacific Railroad, surveyed into rectangles, guarded by the United States Army, and recruited by the daily immigrant ship, moves forward at a swifter pace and in a different way than the frontier reached by the birch canoe or the pack horse." a The idea of communication as a proper public charge was slow in growth. Over the Cumberland road had been fought a great constitutional battle in the twenties. b Subsequent national aid had been granted for improvement schemes through the several States involved. But in the Pacific railways Congress now dealt directly and immediately with the object before it.º The financial settlement with the Pacific railways is so recent that the land grants are still in politics, but in 1862 10 sections of land and a loan of \$16,000 in United States bonds per mile of track did not tempt capital into the forlorn scheme. Construction could not be financed until the act of 1864 had doubled the 10 sections into 20 and allowed the railway company to insert its own first mortgage, to the amount of the government subsidy, ahead of the federal bonds as a lien upon the property. With even this, responsible builders required so large a margin of profit that the construction of the road became a matter of noisome public scandal.d And in our own day a changed financial condition has made it difficult to understand the reasonableness of the original terms.

While the Union Pacific was under construction Congress provided the legal equipment for the annihilation of the entire frontier. The charter acts of the Northern Pacific, the Atlantic and Pacific, the Texas Pacific, and the Southern Pacific at once opened the way for some five new continental lines and closed the period of direct federal aid to railway construction. The Northern Pacific received its charter on the same day that the Union Pacific received its double subsidy in 1864.° It was authorized to join the waters of Lake Superior and Puget Sound, and to receive for its services 20 sections of public land in the States through which it ran and 40 in the Territories. No bonds were granted it, the Union Pacific experiment remaining the first and the last in this direction.

<sup>&</sup>lt;sup>a</sup> F. J. Turner, in American Historical Association Report, 1893, 206.

<sup>&</sup>lt;sup>b</sup> J. S. Young, A Political and Constitutional Study of the Cumberland Road, Chicago, 1902.

<sup>&</sup>lt;sup>c</sup> J. B. Sanborn, Congressional Grants of Land in Ald of Railways, in University of Wisconsin Bulletins, No. 30, is a comprehensive study of these grants. The Illinois Central grant of 1850, which started the policy of land grants for railways, is thoroughly treated by W. K. Ackerman, Historical Sketch of the Illinois Central Railroad, Chicago, 1890.

<sup>&</sup>lt;sup>4</sup> The Contract and Finance Company, which operated for the Central Pacific, escaped public notice, but the Crédit Mobiller of the Union Facific played a large part in the campaign of 1872. (J. B. Crawford, Crédit Mobiller of America; R. Hazard, Crédit Mobiller of America, Providence, 1881; J. F. Rhodes, History of the United States, VII, 1-18.)

<sup>\*13</sup> United States Statutes at Large, 365.

In the sumer of 1866° a third continental route was provided for in the South along the line of the thirty-fifth parallel survey. The Atlantic and Pacific was to build from Springfield, Mo., by way of Albuquerque, N. Mex., to the Pacific, and to connect near the eastern line of California with the Southern Pacific of California. Its subsidy of public lands was like that of the Northern Pacific.

The Texas Pacific was chartered March 3, 1871, as the last of the land-grant railroads. It was to build from the eastern border of Texas to San Diego, Cal., and was promised the usual grant of 20 or 40 sections. But since there were no public lands of the United States in Texas its eastern divisions received no aid from this source, while its more vigorous rival, the Southern Pacific, prevented its line from passing beyond El Paso. As usual, the Southern Pacific of California had been authorized to meet the new road near the Colorado River and had received a 20-section grant. It did better than its federal charter anticipated and organized subsidiary corporations in Arizona and New Mexico, which built rapidly and met the Texas Pacific at the Rio Grande.

To these deliberate acts in aid of the Pacific railways others in the form of local grants were made between 1862 and 1871, so that by the latter date all of the grants had been made, and all that the companies could ask for the future was lenient treatment.<sup>b</sup> For the first time the Federal Government had taken an active initiative in providing for the destruction of a frontier. It resolved in 1871 to treat no longer with Indian tribes as independent nations,<sup>c</sup> and used the Regular Army so vigorously that by 1880 "the majority of the wasteful and hostile occupants of millions of acres of valuable agricultural, pasture, and mineral lands [had] been forced upon reservations under the supervision of the Government \* \* \* and the vast section over which the wild and irresponsible tribes once wandered [were] redeemed from idle waste to become a home for millions of progressive people." <sup>a</sup>

The new Pacific railroads began to build just as the Union Pacific was completed and opened to traffic. In competition with more promising enterprises in the East, they were slow in arousing popular interest. There was little belief in a continental business large enough to maintain four systems, and a general confidence in the desert character of the semiarid plains. Their first period of construction ended abruptly in 1873, when panic brought most transportation

a 14 United States Statutes at Large, 292.

<sup>&</sup>lt;sup>b</sup>G. W. Julian, Our Land-Grant Rallways in Congress, in International Review, XIV, 198-212.

<sup>&</sup>lt;sup>e</sup>This determination was reached in a proviso in the Indian appropriation bill of March 3, 1871. (16 U. S. Stat. at L., 566.)

<sup>&</sup>lt;sup>4</sup> Record of Engagements with Hostile Indians within the Military Division of the Missouri, from 1868 to 1882, Lieut. Gen. P. H. Sheridan, commanding, Chicago, 1882, 119.

projects to an inglorious end and forbade revival for at least five years.

Jay Cooke, whose Philadelphia house had done much to establish public credit during the war and had created a market of small buyers for investment securities on the strength of United States bonds, popularized the Northern Pacific in 1869 and 1870.4 Within two years he is said to have raised thirty millions for the construction of the road, making its building a financial possibility. And although he may have distorted the isotherm several degrees in order to picture his farming lands as semitropical in their luxuriance, he established Duluth and Tacoma, gave St. Paul her opportunity, and had run the main line of track through Fargo, on the Red, to Bismarck, on the Missouri, more than 350 miles from Lake Superior, when his failure, in 1873, brought expansion to an end.

For the Northwest the construction of the Northern Pacific was of fundamental importance. The railway frontier of 1869 left Minnesota, Dakota, and much of Wisconsin beyond its reach. The potential grain fields of the Red River region were virgin forest, and on the main line of the new road, for 2,000 miles, no trace of settled habitation existed. From the summer of 1870 activity around the head of Lake Superior dates. The Lake Superior and Mississippi Railway was started to connect St. Paul and the lake at a point at which "a few papers signed in Philadelphia have made a great northwestern port and market possible—nay inevitable," <sup>c</sup>

At Thompson's Junction on this road the Northern Pacific made a connection, securing its entrance into Duluth by buying a half interest in the tracks it used and building its own line west across the Mississippi River at Brainerd.<sup>a</sup> The statute of 1864 made Lake Superior the eastern terminus, but the logic of trade brought to St. Paul in later years the terminus in fact.

The panie of 1873 caught the Northern Pacific at Bismarck, with nearly 300 unprofitable miles of track extending in advance of the railroad frontier. The Atlantic and Pacific and Texas and Pacific were less seriously overbuilt, but not less effectively checked. The former, starting from Springfield, had constructed across southwestern Missouri to Vinita, in Indian Territory, where it arrived in the fall of 1871. It had meanwhile consolidated with the old South-

<sup>&</sup>lt;sup>a</sup> E. P. Oberholtzer, Jay Cooke, Financier of the Civil War, 11, 74-377; Smalley, Northern Pacific, 134-177.

Osuch a charge was made by Gen. W. B. Hazen, writing from Fort Buford, at the junction of the Missouri and Yellowstone, in the North American Review (CXX, 21), under the title "The great middle region of the United States and its limited space of arable land."

<sup>&</sup>lt;sup>c</sup> J. T. Trowbridge, A Week at Duluth, in Atlantic Monthly, May, 1870, 605.

d Smalley, Northern Pacific, 187, 381.

<sup>&</sup>lt;sup>e</sup> Beadle, who visited Vinita and the Indian country in 1872, has a picturesque description of this "thirty-fifth parallel route." J. II. Beadle, Undeveloped West, 351.

t Poor, Manual of the Railroads of the United States, 1875-76, 741.

west Branch, of Missouri (recently renamed the South Pacific), so that from Springfield it could now get into St. Louis over its own tracks for most of the way. It had also, in 1872, leased for a long term the Pacific of Missouri, with its dependencies. But the panic forced it into default, the lease was canceled, and the Atlantic and Pacific itself emerged from the receiver's hand as the St. Louis and San Francisco.<sup>a</sup> Vinita was and remained its terminus for several years, and the completion of the road as a part of the Pacific system was in a different direction and under a still different control.

The Texas Pacific represented Texas corporations already existing when it received its land grant in 1871. It shortly consolidated local lines in northeast Texas, changed its name to Texas and Pacific. and began construction from Texarkana and Shreveport to Dallas and Fort Worth, on its road to El Paso. At the former points it caught its eastern termini, as did the Atlantic and Pacific at Springfield, Mo. The St. Louis, Iron Mountain and Southern ran from Texarkana to St. Louis, while from Shreveport, down the Red River to New Orleans, the New Orleans Pacific finally undertook the construction of the lines. This borderland of Texas, Missouri, and Arkansas thus became a center of railway development; in the grazing country behind it the meat-packing industries shortly found their sources of supply, and in our own day the State of Oklahoma is its concrete memorial.

The failure of Jay Cooke & Co. in the autumn of 1873 started the general financial panic of that year and deferred for several years the extinction of the frontier.c It would have been remarkable had the waste and speculation of the civil war period and its enthusiasm for economic development escaped the retribution that economic law brings upon inflation. The Granger activities of the years immediately following the panic foreshadowed a period when the frontier demand for railways at any cost should give way to an agricultural insistence upon regulation of railways as the primary need. But as vet the frontier remained substantially intact, and until its railway system should be completed the Granger demand could not be translated into federal activity. For nearly six years after 1873 the Pacific railways, like the other industrial establishments of the United States, remained nearly stationary.

In 1879 the United States emerged from the confusion of the crisis of 1873. Resumption marked the readjustment of national cur-

<sup>Poor, Manual, 1873-74, 520; 1877-78, 826.
Act of May 2, 1872, 27 United States Statutes at Large, 59; Poor, Manual, 1871-72, 548; 1876-77, 703; 1877-78, 345.</sup> 

<sup>&</sup>lt;sup>c</sup> E. W. Martin, History of the Grange Movement, 1874, 184; Smalley, Northern

<sup>&</sup>lt;sup>d</sup> E. E. Sparks, National Development (Vol. XXIII in Hart's American Nation), 21-23, describes the distribution of population in this region.

rency, reconstruction was over, and the railways entered upon the last five years of the culminating period in the history of the frontier. When the five years had ended five new continental routes were available for transportation and the frontier had departed from the United States.

Although it had no continental franchise of its own, the Southern Pacific led in the completion of these new routes and acquired an interest in three eastern termini as a result. The Northern Pacific in the same years completed its own main line, while the Burlington-Rio Grande combination introduced at once a rival to the Union Pacific and an additional continental route.

The Texas and Pacific had only started its progress across Texas when checked by the panic in the vicinity of Dallas. When it revived it consolidated with the New Orleans Pacific to get its entry into New Orleans, and then proceeded to push its track across the State, aided by a state land grant from Texas, toward Sierra Blanca and El Paso. Beyond Texas it never built. Corporations of New Mexico, Arizona, and California, all bearing the same name of Southern Pacific, constructed the line across the Colorado River and along the Gila through the lands acquired by the Gadsden purchase in 1853, Trains were running over its tracks to St. Louis by January, 1882, and to New Orleans in the following October. In the course of this Southern Pacific construction connection had been made with the Atchison, Topeka and Santa Fe at Deming, N. Mex., in March, 1881. But lack of harmony between the roads thus meeting seems to have minimized the importance of the through route thus formed.c

The owners of the Southern Pacific opened an additional line through southern Texas in the beginning of 1883.<sup>4</sup> The Galveston, Harrisburg and San Antonio, of Texas, was the earliest road char-

<sup>&</sup>lt;sup>a</sup> Poor, Manual, 1884, 852. The New Orleans Pacific was the assignce of the New Orleans, Baton Ronge and Vicksburg, to which a land grant had been made in 1871. Congress annulled a portion of the grant in 1887. Sanborn, Congressional Grants of Land in Aid of Railways, 125.

b The Southern Pacific selzed the Fort Yuma crossing of the Colorado River in spite of federal and Texas and Pacific portests. (45th Cong., 2d sess., II. Ex. Doc. 33.) It later induced the Texas and Pacific to transfer to it the land grants west of El Paso pertalning to the latter road, and insisted before Congress upon its right to receive the lands although the grants were voldable, if not vold, because of the fallure of the Texas and Pacific to build within the time limit prescribed. (48th Cong., 1st sess., 8. Ex. Doc. 27.) Congressional committees reported adversely to this chim of the Southern Pacific. (48th Cong., 1st sess., B. Ex. Doc. 27.) Congressional committees reported adversely to this chim of the Southern Pacific. (48th Cong., 1st sess., II. Rep. 62; see also the reports to the House in 1877, 44th Cong., 2d sess., II. Rep. 139, parts 1 and 2, and also 43d Cong., 2d sess., II. Mis. Docs. 6 and 36.) On February 25, 1885, Congress declared the whole Texas Pacific land grant forfelted. (Sanborn, Congressional Grants of Land in Aid of Railways, 125; 23 U. S. Stat. L., 337.)

<sup>\*</sup> Poor, Manual, 1884, 887; Commercial and Financial Chroniele, March 12, 1881, 276.
\* Through trains to New Orleans were running by February 1. (Commercial and Financial Chronicle, September 8, 1883, 265; Rallroad Gazette, January 9, 1883, 51, and February 2, 1883, 84.)

tered in the State.<sup>a</sup> Around this as a nucleus other lines were assembled,<sup>b</sup> and double construction was begun from San Antonio west, and from El Paso, or more accurately Sierra Blanca, east. Between El Paso and Sierra Blanca, a distance of about 90 miles, this new line and the Texas Pacific used the same track. In later years the Texas Pacific was drawn away from the Southern Pacific by its St. Louis, Iron Mountain and Southern connection at Texarkana into the Missouri Pacific System, and the combination route through San Antonio and Houston became the main line of the Southern Pacific.

A third connection of the Southern Pacific across Texas was operated before the end of 1883, over its Mojave extension in California and the Atlantic and Pacific from the Needles to Albuquerque. The old Atlantic and Pacific, chartered with land grant in 1866, had built to Vinita by 1871, and had stopped there. It had defaulted after the panic, gone into receivership, and emerged as the St. Louis and San Francisco. But even after its emergence it refrained from construction much beyond its Vinita terminus.<sup>c</sup> Meanwhile the Atchison, Topeka and Santa Fe had reached Albuquerque, N. Mex. This road. building up the Arkansas through Kansas, possessed a land grant as far as the Colorado state line.<sup>d</sup> Entering Colorado, it had passed by Las Animas and thrown a branch along the old Santa Fe trail to Santa Fe and Albuquerque. At this last point it came to an agreement with the St. Louis and San Francisco by which the two roads should build jointly from Albuquerque, under the Atlantic and Pacific franchise, into California, and rapid construction had commenced in the period of revival. The Southern Pacific of California had not, however, relished a rival in its State, while the Atlantic and Pacific charter privilege extended to the Pacific. Long before the new road, advancing from Albuquerque, reached its Colorado crossing at the Needles a Mojave branch of the Southern Pacific was waiting at that point, ready by its presence to force the invading road to make terms with it for admittance. And thus upon the completion of the Colorado and Rio Grande bridges the Southern Pacific obtained its third entry into the East. Pullman cars were running into St. Louis on October 21, 1883,<sup>†</sup>

The names of Billings and Villard are most closely connected with the renascence of the Northern Pacific. This line, with its generous

<sup>&</sup>lt;sup>a</sup> It was organized in 1850 as the Buffalo Bayou, Brazos and Colorado. (H. H. Bancroft, Works, XVI, 570.)

<sup>&</sup>lt;sup>b</sup> Commercial and Financial Chronicle, August 25, 1883, 200.

c Rallroad Gazette, May 11, 1883, 301; Commercial and Financial Chronicle, May 26, 1883, 588.

<sup>&</sup>lt;sup>d</sup> 11s 10-section land grant was based upon a grant by Congress to the State of Kansas, March 3, 1863. (Report of the Commissioner of Rallroads, 1882, 268; 1883, 130.) It reached Albuquerque in April, 1880, and Deming in March, 1881.

Report of the Auditor of Railroad Accounts, 1880, 52.

<sup>/</sup> Commercial and Financial Chronicle, October 20, 1883, 423; H. H. Bancroft, California, VII, 613; Railroad Gazette, October 26, 1883, 711.

land grant, had stopped before the panic at the Missouri River. In Oregon it had built a few miles into its new terminal city, Tacoma, The illumination of crisis times had served to discredit the route which Jay Cooke had so effectively boomed in earlier days. The existence of various land-grant railways in Washington and Oregon made its revival difficult to finance, since its various rivals could offer competition by both river and rail along the Columbia Valley below Walla Walla. Under the presidency of Frederick Billings construction revived about 1879, from Mandan, opposite Bismarck. on the Missouri, and from Wallula, at the junction of the Columbia and Snake.a From these points lines were pushed over the Pend d'Oreille and Missouri divisions toward the Continental Divide. Below Wallula the Columbia Valley traffic was shared by agreement with the Oregon Railway and Navigation Company, which, under the presidency of Henry Villard, owned the steamship and railway lines of Oregon, b As the time for opening the through route approached the question of Columbia River competition increased in serious aspect. Villard solved the problem through the agency of his famous blind pool, which still stands remarkable in railway finance. With the proceeds of the pool he organized the Oregon and Transcontinental as a holding company, and purchased a controlling interest in each of the rival roads. With harmony of plan thus insured, he assumed the presidency of the Northern Pacific in 1881, in time to complete and celebrate the opening of its main line in 1883. He tried to give to this event a national aspect, but there were now four other through lines in operation, and a keen observer remarked that the "mere achievement of laying a continuous rail across the continent has long since been taken out of the realm of marvels, and the country can never feel again the thrill which the joining of the Central and Union Pacific lines gave it." a

The land-grant railways completed these eastern connections across the frontier in the period of culmination. Private capital added another in the new route through Denver to Ogden, controlled by the Chicago, Burlington and Quincy and the Denver and Rio Grande. The Burlington, built along the old Republican River trail to Denver, had competed with the Union Pacific for the traffic of that point in

<sup>&</sup>lt;sup>a</sup> Smalley, Northern Pacific, 229; Report of the Commissioner of Railroads, 1883, 135-144.

<sup>&</sup>lt;sup>b</sup> H. Villard, Memoirs of Henry Villard, Journalist and Financier, 1835-1900, II, 284-289; Smalley, Northern Pacific, 258.

<sup>&</sup>lt;sup>c</sup> Villard, Memoirs, II, 297; Smalley, 269; Henry Clews, Twenty-eight Years of Wall Street, 209-214.

<sup>&</sup>lt;sup>4</sup> The Nation, September 13, 1883, 215, 218. The celebration was on September 8, and was graced by an oration by W. M. Evarts. (Villard, II, 311.) Villard was somewhat distrusted, Poor remarking that much of the popular reluctance to buy railroad stocks was due to his "visionary schemes of immense magnitude." (Railroad Manual, 1884, introd. III. See also Railroad Gazette, September 14, 1883, 606; Commercial and Financial Chronicle. September 29, 1883, 331; Engineering News, September 15, 1883, 439; J. W. Johnston, Railway Land Grants, in North American Review, CXL, 280-280.)

June, 1882. West of Denver the narrow gauge of the Denver and Rio Grande had been advancing since 1870.

Gen. William J. Palmer and a group of Philadelphia capitalists had, in 1870, secured a Colorado charter for their Denver and Rio Grande. Started in 1871, it had reached its new settlement and health resort at Colorado Springs that autumn, and had continued south in later years. Like other roads, it had progressed slowly in panic years. In 1876 it had been met at Pueblo by the Atchison, Topeka and Santa Fe. From Pueblo it contested successfully with its rival for the grand canvon of the Arkansas, and built up that valley. through the Gunnison country, and across the old Ute Reserve to Grand Junction. From the Utah state line it had been continued to Ogden by the Denver and Rio Grande Western, an allied corporation. A through service to Ogden, inaugurated in the summer of 1883, brought to the Union Pacific for the first time, and for its whole business, a competition which it tried to offset by hurrying its own branches from Ogden, the Utah Northern and the Oregon Short Line, north into the field of the Northern Pacific.

The continental frontier, upon which the first inroad had been made in 1869, was thus completely destroyed in 1884. Along six different lines between New Orleans and St. Paul it had been made possible to cross the sometime American desert to the Pacific States.<sup>d</sup> No. longer could any portion of the Republic be considered beyond the reach of colonization. Instead of a waste that forbade national unity and compelled a rudimentary civilization in its presence, a thousand plains stations beckoned for colonists and through lines bound the nation into an economic and political unit. That which General Sheridan had foreseen in 1882 was now a fact. He had written: "As the railroads overtook the successive lines of isolated frontier posts and settlements spread out over country no longer requiring military protection, the army vacated its temporary shelters and marched on into remote regions beyond, there to repeat and continue its pioneer work. In rear of the advancing line of troops the primitive 'dugouts' and cabins of the frontiersmen were steadily replaced by the tasteful houses, thrifty farms, neat villages, and busy towns of a people who knew how best to employ the vast resources of the great West. The civilization from the Atlantic is now reaching out toward that rapidly approaching it from the direction of the Pacific, the long intervening strip of territory, extending from the British possessions to Old Mexico, yearly growing narrower; finally

Poor, Manual, 1883, 694.
 Poor, Manual, 1881, 790; 1883, 889; J. C. Smiley, History of Denver, 607.

Railroad Gazette, Angust 3, 1883, 510; H. H. Bancroft, Utah, 759; Poor, Manual,

<sup>&</sup>lt;sup>4</sup> Cf. H. R. Meyer, The Settlements with Pacific Railways, in Quarterly Journal of Economics, X111, 427-444.

the dividing lines will entirely disappear and the mingling settlements absorb the remnants of the once powerful Indian nations who, fifteen years ago, vainly attempted to forbid the destined progress of the age." Within two years after this utterance the frontier had finally disappeared, and with it had ended what Professor Turner has called "the first period of American history."

The significance of the frontier in American history has been considered at length in recent years. After 1885 the historical problem is the significance of the disappearance of the frontier. In the change of epochs problems change as well. National organization replaces sectional; state activities tend to give way to federal; corporate organization succeeds individualistic; public regulation supersedes private initiative; and the imperative need for the creation of material equipment is transmuted into an equal necessity for the control of the activities to which the former need gave birth.

<sup>&</sup>lt;sup>a</sup> Record of Engagements with Hostile Indians within the Military Division of the Missourl, from 1868 to 1882, Lleut. Gen. P. H. Sheridan, commanding, Chicago, 1882, 120.

### DISCUSSION OF DOCTOR PAXSON'S PAPER.a

#### By B. H. MEYER.

The paper on the Pacific Railroads and the Disappearance of the Frontier describes the primary waves of a movement, the secondary and tertiary waves of which are still in progress, emanating from the advancing railway systems like waves from a moving steamship.

It is well known that analogies do not walk on all fours. However, I desire to suggest an analogy in the hope that it may clarify and emphasize what I have in mind. The institutions of this country, taken collectively, may be represented by a cable system, each cable having as many separate wires as there are distinct institutions. These cables, like our institutions, extend through many States, the most of them from ocean to ocean and from Gulf to Lakes. For reasons which are generally recognized and which need not be recited here, state lines are convenient if not necessary boundaries of territorial units for investigation. I should like to see a great series of monographs, each covering one institution in one State, corresponding to one strand in the cable, for every State in the Union, which could be turned over to the national historian of our economic and other institutions. With such a huge collection of state sections of wires and cables before him, the national historian would become the grand chief cable-splicer, and he could present to all the world the completed institutional cable system as it has developed and exists throughout the length and breadth of the United States.

Unless a great army of state historians will prosecute its work diligently, we shall never have a complete national history. Railway history illustrates this point. In a general way it is known, for instance, that the inhabitants of certain cities opposed the physical union of continuous lines of railway, during early epochs of railway development, with sledge hammers, pitchforks, scythes, and similar weapons. The grotesque features of this type of mob opposition have been described for a few localities, but anything like a complete description of the events has not come to my notice, although many

Remarks made after the reading of three papers in American economic history, by the chairman of the railroad commission of Wisconsin.

States doubtless furnish ample material for a chapter on this subject. The historian of our political institutions would doubtless not consider it beneath his dignity to devote a chapter to violence at the polls, like lassoing voters of certain persuasions on election day in western New York during Monroe's administration, but to the historian of our railways the facts referred to are equally interesting, although neither may be of much fundamental importance.

During territorial days and the days of early statehood in Wisconsin numerous localities on Lake Michigan and on the Mississippi River yied with one another to become the termini of the proposed Milwaukee and Mississippi Railway, which was to constitute the first link in the great transcontinental chain. Milwaukee, the present metropolis of this State, was then rebuked for arrogantly assuming leadership when such important places as Belmont and Mineral Point, not to speak of Kenosha, Racine, Sheboygan, on Lake Michigan, Prairie du Chien, Potosi, and Snake Hollow, on the Mississippi River, had equal claim, in the opinion of the editors of those places, to the distinction of being leading towns in Wisconsin. The ambition of those days was not always limited by the facts of geography and actual possibilities of immediate development. A primitive editor of Fond du Lac held out to his readers the vision of teas and spices coming directly from China and Japan, which he regarded as a part of the West, over the transcontinental railway, which he desired to have constructed along the northern route. The real rivalry among our southern, middle, and northern transcontinental railways of to-day was then a theoretical rivalry of subjective possibilities of competing localities interested in their respective routes. Horace Greeley entered into the discussion of the relative merits of these routes, and in one editorial he strikes the climax of his argument by practically ignoring all others except the fact that the circumference of the earth in the higher latitudes is much smaller than at the equator and southern latitudes, and that therefore any man with the sense of a schoolboy might know that the northern route was the most desirable one. Incidentally it should be observed that this early dream of the Milwaukee and Mississippi Railway being a link in a transcontinental chain is being realized to-day in the Pacific coast extension of the St. Paul System, of which the old Milwaukee and Mississippi has long been a part. During the present month of December the track has been marching westward at the rate of 2 miles and over per day. Secondary waves of frontier life are accompanying this march. While the frontier has gone, it is still here. The primary frontier has disappeared. The secondary frontier is the wave of conquest of our national resources on whose crest the frontiersman, of a different type, perhaps, but still a frontiersman. reigns supreme. That frontier still exists if we may rely upon the

accounts of the men who are sharing that life. Those of our honored members who come from the ancient East, which once was the United States, and which for some years thereafter continued to play a predominating rôle in our national life, may not appreciate that this great West is only beginning to shake off the spray of the Atlantic. The vast empire west of the Mississippi River has not yet been "scratched," and even here in old Wisconsin we are only beginning to lay our permanent foundations. The rivalry of cities, territorial groups, and transportation routes suggested in these remarks represents cable sections which are waiting for the state historian, who in turn must dedicate them to the national historian, provided he himself does not act as chief cable-splicer. Historical accounts of events like these would be as fascinating as the greatest novel.

Another illustration is found in the rivalry between different means of transportation. The introduction of the Conestoga wagon was opposed by the owners of pack horses. Both of these interests united with the interests represented by plank roads, turnpikes, and canals in opposition to the railway. More or less of this rivalry has continued into our own times. Probably every State in the Union has material for a chapter upon this subject, yet in scarcely half a dozen of them has it been collected and wrought into a complete and accurate history. This is an important history—important not only because of the knowledge which it affords regarding our industrial development, but also because of the bearing of this history upon contemporary movements. The revival of our inland waterways has already been made a national issue. Before we enter upon a scheme of internal improvements, involving hundreds of millions of dollars. we should most assuredly inform ourselves with respect to the limitations and possibilities of that scheme. The past throws valuable sidelights upon this subject, both in the United States and in Europe. A mere sentimental appeal to waterways as a regulator of railway rates that would justify undertakings of greatest magnitude is nonsense. Waterways never have regulated railway rates. They have influenced them, sometimes to the extent of demoralization; but to influence is not to regulate. At no time in the history of internal improvements in the United States has it been more vital to obtain a technical basis for our projects than at present. First of all, engineers of highest attainment and absolute integrity must tell us whether a certain project is possible from an engineering standpoint, and as accurately as possible what it will cost to complete it. Next, we must have a careful survey of the commerce of the country with a view of determining how much it may reasonably be expected to gain from the contemplated improvement. Finally, having these facts before us, the people of this country may be left to decide for themselves whether they desire to have a certain improvement undertaken or not. Simply to proclaim that we want certain improvements, irrespective of the considerations named, is like wishing to ride in a Pullman coach to a distant planet. I am firmly convinced that this country has never faced a more critical situation with respect to internal improvements than that which is impending. It is to be hoped that State and national historians will unite in bringing to the citizens of this country the true and complete facts of history. Prophetic vision must be utilized not only in arousing enthusiasm for a scheme, but also in putting into proper perspective its limitations.

All of us could, no doubt, add many illustrations of special studies which must be undertaken before our national economic history, at least, can be made complete, and of which the three papers before us are excellent illustrations. I desire, therefore, to repeat that we need special intensive study—monographs, more monographs, and many more monographs—sections of cables for our chief cable-splicers. The monographs suggested all have more or less of a practical bearing, but it should be needless to state that all historical research. whether practical or not, is here referred to. Those special studies which partake of a more practical nature constitute the ground upon which the academic man meets the executive, judicial, administrative, or legislative man. I assume that the aim of our efforts is to learn to know the real world of the past and of the present in order that we may intelligently guide, in so far as guidance is possible, the future. We must look to the academic man and the scholarly publicists not connected with universities, like those represented in the membership of this association, to gather the many threads of the various phases of our national life and focus them upon a specific problem of to-day. Only in this way may we hope to act correctly regarding current questions. "The point of departure as well as the aim of our science is man" was the keynote of Roscher's first course of lectures at the University of Leipzig. Roscher's words are still the best touchstone of economic study. In order to vitalize our study and make it real the academic man and the man of affairs must act in closest cooperation with each other lest there be reared two independent structures, the one that of the academic man, separate and apart from the real world in which we live, and therefore lacking vitality and intrinsic worth, and the other that of the man of affairs, unsymmetrical, crude, and ill-adjusted because it lacks the touch of the hand of full knowledge.







